

TABLE 81. Discriminant function applied to differentiation of habitats with *H. helix*, *L. japonica*, and *I. pseudacorus* and similar habitats without the exotic from depths of overstory, understory, and shrub layers in m from simple random sampling design surveys

Surveys	Results	
	No. of points	Discriminant function
Forest, no exotics with upland <i>H. helix</i>	20	$Z = X_1 + 1.2114 X_2 - 2.0954 X_3^a$ SHRUB, Understory, overstory <sup>b</sup>
Forest, no exotics with natural understory <i>L. japonica</i>	18	$Z = X_1 - 3.9982 X_2 - 13.1068 X_3$ SHRUB, Understory, overstory
Forest, no exotics with cleared understory <i>L. japonica</i>	20	$Z = X_1 + 6.5546 X_2 + 35.6655 X_3$ SHRUB, Understory, overstory
Flood plain with and without <i>H. helix</i>	18	$Z = 2.3231 X_1 + X_2 + 25.4955 X_3$ SHRUB, Overstory, understory
Swamp-marsh transition with and without <i>I. pseudacorus</i>	23	$Z = X_1 + 3.4253 X_2$ SHRUB and UNDERSTORY, overstory
Swamp and swamp-marsh transition (no exotics)	23	$Z = X_1 - 1.1911 X_2 + 3.8935 X_3$ SHRUB, Understory, overstory
Swamp and swamp-marsh transition ( <i>I. pseudacorus</i> )	26	$Z = 1.3379 X_1 + 4.1090 X_2 + X_3$ UNDERSTORY, Overstory, shrub

Surveys	Results	
	F value	Significance
Forest, no exotics with upland <i>H. helix</i>	more variation within groups than between groups	not significant
Forest, no exotics with natural understory <i>L. japonica</i>	3/14 df = 1.081	not significant at 0.1
Forest, no exotics with cleared understory <i>L. japonica</i>	3/16 df = 6.300	significant at 0.005
Flood plain with and without <i>H. helix</i>	more variation within groups than between groups	not significant
Swamp-marsh transition with and without <i>I. pseudacorus</i>	2/20 df = 8.216	significant at 0.005
Swamp and swamp-marsh transition (no exotics)	3/19 df = 9.133	significant beyond 0.001
Swamp and swamp-marsh transition ( <i>I. pseudacorus</i> )	3/22 df = 32.879	significant beyond 0.001

<sup>a</sup> $X_1$  is overstory,  $X_2$  is understory,  $X_3$  is shrub layer.

<sup>b</sup>The relative importance of each layer for each discriminant function is written in order with the most important on the left side.